

Results and Discussion

After observing overall performance, especially the appearance of the husked ear, the following conclusions were made:

Golden Cross Bantam 51-T from Asgrow and Golden Cross Bantam from Crookham were consistently the best performers and should be recommended. Golden Cross from Corneli, Golden Prolific and Ioana performed fairly well and deserve consideration for recommendation. Possibilities which need further testing are Victory Golden, Superchief, Iocross, Valleygold, XP204, Crookham C63-1, Crookham 963 and Golden Rio. The varieties which performed poorly in these tests were Golden Challenger, SRS 2040, Golden Sensation, KVF 57-83B and Calumet.

Fall Armyworm Control on Sweet Corn with Granular Insecticides (Paul D. Gerhardt)

Abstract: Several seasons of work indicate that topical application of granular pesticides to the whorl of fall grown sweet corn will effectively control the fall armyworm. First application to be made when the corn is approximately 12 inches high, followed by one or two additional applications at intervals of one week. The following three materials: 5 percent Diazinon granular, 5 percent Zectran granular, and 2 percent Endrin granular are the most promising when applied at 20-30 pounds per acre.

Introduction

One of the serious pests of fall grown sweet corn in Arizona is the fall armyworm, Laphygma frugiperda (J. E. Smith). This insect feeds in the whorl of the developing corn plant. If it is not controlled, the plants become stunted, the tassels partially or completely destroyed and poor pollination occurs.

During the past several years, trials have been conducted at the University of Arizona, Mesa Branch Station for the control of this destructive pest.

Methods

Golden Bantam sweet corn (T-51 strain) planted approximately 15 August on 34 inch row spacing.

Plots were four beds wide by 50 feet long, with each treatment replicated four times.

The first granular pesticide applications were made when the plants were approximately 12 inches high. Granular insecticides were applied with a rotary hand duster having a flat fan at the tip of the discharge tube to direct the material into the whorl of the plant. The first treatment should be followed by a second and possibly third application at weekly intervals.

Data was obtained from the two middle rows of each plot, twenty plants were examined from each plot for the presence or absence of fall armyworm damage.

The same pesticides may be applied as sprays, but are not as effective and there is the added danger of them being phytotoxic when applied to the whorl.

Results and Discussion

Results of two applications of granular pesticides are given in Table 1. This data indicates that diazinon, endrin, and zectran granules gave good control, but that a third application was necessary as can be seen by the counts taken October 4. The two Bayer compounds were less effective and the untreated check plot showed almost 100 percent infestation.

Another trial conducted in 1964 confirmed the results obtained in 1963.

Plots receiving granular diazinon and zectran treatments were generally greener, the plants were taller. They tasseled earlier and set a larger percentage of marketable ears.

The treatments discussed here only protect the plant up to tasseling. In order to protect the ears from the attack of the corn earworm, additional insecticide treatments are required at silking time directly to the silks.

Table 1. Granular insecticide treatments of fall sweet corn.

Materials	Treatments ^{1/}		Fall Armyworm in Whorls per 80 plants		
	Amt./Acre Form.	Tox.	September 16	September 24	October 4
*5% Diazinon Gran.	20 lbs.	1 lb.	2	0	23
5% Zectran Gran.	20 lbs.	1 lb.	1	2	19
*2% Endrin Gran.	30 lbs.	6 lbs.	3	0	38
5% Bayer 30007 Gran.	20 lbs.	1 lb.	21	25	58
10% Bayer 25141 Gran.	10 lbs.	1 lb.	13	5	29
Untreated check	-	-	49	71	79

^{1/} Treatments applied September 9 and 18.

* Commercially available.

Curly Top Resistant Tomato Variety Observations

(N. F. Cebker, Arlen Davison, John Sears and County Agents)

Abstract: The performances of four curly top resistant tomato varieties were observed in Arizona during the period 1961 to 1964. Cwyhee showed resistance but produced small fruits.